What is claimed is:

1. A therapeutic system, comprising:

a guide catheter having a lumen;

a sheath having an elongate body that has a lumen and a distal end, the sheath extending through the lumen of the guide catheter; and

a catheter extending through the lumen of the sheath.

2. The system of claim 1, wherein the sheath further includes a proximal end, and a valved fitting provided at the proximal end of the sheath.

3. The system of claim 1, wherein the elongate body comprises a main shaft member and a distal shaft member, with the lumen of the sheath extending through the main shaft member and a distal shaft member.

4. The system of claim 3, wherein the main shaft member is formed of an outer polymeric material having a reinforcing layer embedded therein.

5. The system of claim 4, wherein the reinforcing layer is made of stainless steel.

6. The system of claim 4, wherein the reinforcing layer is made of a superelastic alloy.

7. The system of claim 4, wherein the reinforcing layer is a braid.

8. The system of claim 4, wherein the reinforcing layer is a coil.

9. The system of claim 3, wherein the lumen of the sheath has an inner wall, with a lubricious polymeric material provided on the inner wall of the lumen of the sheath.

10. The system of claim 3, wherein the outer diameter of the distal shaft member is smaller than the outer diameter of the main shaft member.

11. The system of claim 3, wherein the distal shaft member is formed of a polymeric material that is free of any reinforcments.

12. The system of claim 3, wherein the hardness of the material at the distal shaft member is equal to the hardness of the material at the main shaft member.

13. The system of claim 1, wherein the elongate body has an outer surface that is coated with a lubricious coating.

14. The system of claim 1, wherein the catheter is an ultrasound catheter.

15. The system of claim 1, wherein the catheter has a proximal end, the system further including a transducer housing coupled to the proximal end of the catheter.

16. The system of claim 1, wherein the distal end of the elongate body is angled by an angle of between 10 degrees and 90 degrees.

17. A method of placing the distal end of a catheter at a desired location inside a vessel, comprising:

providing a sheath having an elongate body that has a lumen and an angled distal end;

extending a catheter through the lumen of the sheath; and

extending the sheath through the lumen of a guide catheter.

18. The method of claim 17, further including:

advancing the sheath independently beyond the distal end of the catheter.

19. The method of claim 17, further including:

retracting the sheath proximal from the distal end of the catheter.

20. The method of claim 17, further including:

torquing the sheath to redirect the angled distal end of the sheath.